

What is claimed is:

1. A heat sink assembly comprising:
  - a heat sink comprising a base defining a plurality of bores therein;
  - a retention frame adapted to be secured to a printed circuit board, the frame defining a pair of screw holes therein;
  - a fastener placed on the heat sink and defining a pair of positioning holes;
  - a plurality of pins received through the bores of the base and in the fastener; and
  - a plurality of spring members respectively surrounding the pins between the base and the fastener; and
  - a pair of posts received through the positioning holes and engaged in the screw holes of the retention frame, thereby securing the fastener to the retention frame with the spring members pressing toward the base.
2. The assembly of claim 1, wherein the bores are defined in the base at respective opposite sides of the plurality of fins.
3. The assembly of claim 2, wherein two pairs of locating holes are defined in the fastener, and each pair of locating holes is disposed at opposite sides of a corresponding positioning hole.
4. The assembly of claim 3, wherein the pins are fittingly received in the locating holes of the fastener.
5. The assembly of claim 1, wherein a pair of through holes is defined in the base of the heat sink in alignment with the positioning holes respectively, for receiving the posts therethrough.

6. A heat sink assembly comprising:
  - a printed circuit board;
  - an electronic package mounted on the printed circuit board;
  - a retention frame mounted on the printed circuit board and surrounding the electronic package;
  - a heat sink engaged on the electronic package;
  - a fastener located around the heat sink and downwardly pressing the heat sink via resilient means; and
  - posts attaching the fastener to the retention frame so that the heat sink is resiliently engaged on the electronic package.
7. The assembly of claim 6, wherein the posts extend through both the fastener and the heat sink.
8. The assembly of claim 6, wherein a plurality of pins extends through the retention frame, the heat sink and the fastener for preventing transverse movement of the heat sink relative to the electronic package.
9. The assembly of claim 8, wherein said resilient means comprises a plurality of springs located around the pins.
10. The assembly of claim 6, wherein the retention frame defines an opening receiving the electronic package therethrough.
11. The assembly of claim 6, wherein the electronic package is an integrated circuit chip directly soldered on the printed circuit board.
12. A heat sink assembly comprising:

a printed circuit board;

an electronic package sub-assembly mounted on the printed circuit board;

a retention frame mounted on the printed circuit board and surrounding said electronic package sub-assembly;

a heat sink seated upon the electronic sub-assembly;

a fastener located above said heat sink and downwardly pressing the heat sink via resiliency means; and

an attachment device including two opposite ends respectively engaged with the fastener and the retention frame when said resiliency means is in tensioned status whereby said heat sink resiliently abuts downwardly against the electronic package thereunder.

13. The assembly of claim 12, wherein said attachment device is fixed to the retention frame while is moveable relative to the fastener in a vertical direction when said resiliency means is further compressed.